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| APPLICATION NO.                     | FILING DATE        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-------------------------------------|--------------------|----------------------|-------------------------|------------------|
| 10/092,662                          | 03/06/2002         | Masashi Yano         | 16869N -045500US        | 3839             |
| 20350 75                            | 90 06/13/2006      |                      | EXAMINER                |                  |
|                                     | AND TOWNSEND AN    | ORTIZ, BELIX M       |                         |                  |
| TWO EMBARCADERO CENTER EIGHTH FLOOR |                    |                      | ART UNIT                | PAPER NUMBER     |
|                                     | SCO, CA 94111-3834 |                      | 2164                    |                  |
|                                     |                    |                      | DATE MAILED: 06/13/2000 | 5                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Application No.                                                                                                                                                    | Applicant(s)                                                               |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 10/092,662                                                                                                                                                         | YANO ET AL.                                                                |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Examiner                                                                                                                                                           | Art Unit                                                                   |  |  |  |
| ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Belix M. Ortiz                                                                                                                                                     | 2164                                                                       |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ears on the cover sheet with the c                                                                                                                                 | orrespondence address                                                      |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).                                                                                         | ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be ting  11 apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                    |                                                                            |  |  |  |
| Responsive to communication(s) filed on <u>24 Mar</u> This action is <b>FINAL</b> . 2b) ☐ This      Since this application is in condition for allowant closed in accordance with the practice under E                                                                                                                                                                                                                                                                                                                                                                                                             | action is non-final.<br>ace except for formal matters, pro                                                                                                         |                                                                            |  |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                    |                                                                            |  |  |  |
| 4) ☐ Claim(s) 24-34 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 24-34 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine                                                                                                                                                                                                                                                                                       | vn from consideration.                                                                                                                                             |                                                                            |  |  |  |
| 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the objected to by the Example 11). The oath or declaration is objected to by the Example 11.                                                                                                                                                                                                                                                                                                                                                                                                                        | drawing(s) be held in abeyance. See<br>on is required if the drawing(s) is ob                                                                                      | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                       |  |  |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                    |                                                                            |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |                                                                                                                                                                    |                                                                            |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date                                                                                                                                                                                                                                                                                                                                                                                                         | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:                                                                                         |                                                                            |  |  |  |

#### DETAILED ACTION

#### Remarks

1. In response to communications files on 24-March-2006, claim 24 is amended per applicant's request. Therefore, claims 24-34 are presently pending in the application.

### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim 24 is rejected under 35 U.S.C. 103(a) (Eff. Filing date of foreign application 2/28/2002) as being unpatentable over Fisher et al. (U.S. patent 6,535,891) (Eff. Filing date of application 9/26/2000) in view of Leung et al. (US pub. 2003/0046270) (Eff. Filing date of provisional application 2/21/2002).

As to claim 24, Fisher et al. teaches a storage system comprising:

at least one communication port configured to be coupled to a network (see column 4, lines 4-13 and column 9, lines 18-25);

a plurality of storage devices (see abstract); and

a controller in data communication between the storage devices and the at least one communication port (see claim 49 and column 3 lines 47-54),

wherein the at least one communication port receives from a computer connected

to the network a request for storing file data (see abstract and claim 19),

wherein the controller is operable to obtain the file data associated with the request for storing (see column 9, lines18-25),

wherein the controller is further operable to store constituent data blocks of the file data among one or more of the storage devices (see column 1, lines 30-58).

<u>Fisher et al.</u> does not teach wherein for each data block, a destination storage device is selected based at least on content of the data comprising the data block.

Leung et al. teaches techniques for storing data based upon storage policies (see abstract), in which he teaches wherein for each data block, a destination storage device is selected based at least on content of the data comprising the data block (see paragraph 12 and claim 4).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Fisher et al. by the teaching of Leung et al., because wherein for each data block, a destination storage device is selected based at least on content of the data comprising the data block, would enable the storage system because, the storage locations are determined based upon characteristics associated with the data to be stored, based upon characteristics of the storage devices, and based upon storage policies configured for the storage environment (see Leung et al., paragraph 12).

4. Claims 24-27 and 32-34 are rejected under 35 U.S.C. 103(a) (Eff. Filing date of foreign

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application 2/28/2002) as being unpatentable over <u>Fisher et al</u>. (U.S. patent 6,535,891) (Eff. Filing date of application 9/26/2000) in view of <u>Schilit et al</u>. (US pub. 2002/0052898) (Eff. Filing date of application 4/14/1998).

As to claim 24, Fisher et al. teaches a storage system comprising:

at least one communication port configured to be coupled to a network (see column 4, lines 4-13 and column 9, lines 18-25);

a plurality of storage devices (see abstract); and

a controller in data communication between the storage devices and the at least one communication port (see claim 49 and column 3 lines 47-54),

wherein the at least one communication port receives from a computer connected to the network a request for storing file data (see abstract and claim 19),

wherein the controller is operable to obtain the file data associated with the request for storing (see column 9, lines18-25),

wherein the controller is further operable to store constituent data blocks of the file data among one or more of the storage devices (see column 1, lines 30-58).

Fisher et al. does not teach wherein for each data block, a destination storage device is selected based at least on content of the data comprising the data block.

Schilit et al. teaches method and system for document storage management based on document content (see abstract), in which he teaches wherein for each data block, a destination storage device is selected based at least on content of the data comprising the data block (see abstract).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Fisher et al.</u> by the teaching of <u>Schilit et al.</u>, because wherein for each data block, a destination storage device is selected based at least on content of the data comprising the data block, would enable the storage system because, a document storage management system and method that manages the storage of documents based upon the similarity of the content of the documents (see <u>Schilit et al.</u>, abstract).

As to claim 25, <u>Fisher et al.</u> teaches the storage system further comprising a memory controller, wherein the tile data comprises a first data block and a second data block (see figure 4), wherein the memory is configured with information indicative of one or more storage devices on which the first data block is to be stored and on which the second data block is to be stored (see <u>Fisher et al.</u>, column 1, lines 52-58 and column 3, lines 47-54), wherein the controller is operable to store the first data block on a first of the one or more storage devices and to store the second data block on a second of the one or more storage devices according to the information (see <u>Fisher et al.</u>, column 3, lines 47-54).

As to claim 26, <u>Fisher et al.</u> teaches the storage system further comprising a memory controller, wherein the memory is configured with information that associates one or more storage devices with a data structure and with the port over which data is received (see <u>Fisher et al.</u>, figures 1 and 2), wherein the controller identifies a destination

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storage device for a received data block based at least on a data structure of the received data block and the port over which the received data block was received (see <u>Fisher et al.</u>, column 1, lines 49-54).

As to claim 27, <u>Fisher et al</u>. teaches wherein a first storage device is designated to store data blocks of a first data structure, wherein the controller stores a received data block having the first data structure in the first storage device (see <u>Fisher et al</u>., figure 2 and column 1, lines 49-51).

As to claim 32, <u>Fisher et al.</u> teaches wherein one of the data blocks comprises image data (see <u>Fisher et al.</u>, column 1, lines 30-34).

As to claim 33, <u>Fisher et al.</u> teaches wherein one of the data blocks comprises synchronous data to reproduce data in a synchronous manner (see <u>Fisher et al.</u>, column 1, lines 30-34).

As to claim 34, <u>Fisher et al.</u> teaches wherein one of the data blocks comprises an object data of multimedia data (see <u>Fisher et al.</u>, column 1, lines 30-34).

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 28-31 are rejected under 35 U.S.C. 103(a) (Eff. Filing date of foreign application 2/28/2002) as being unpatentable over Fisher et al. (U.S. pat. 6,535,891) (Eff. Filing date of application 9/26/2000) in view of Schilit et al. (US pub. 2002/0052898) (Eff. Filing date of application 4/14/1998) as applied to claims 24-27 and 32-34 above, in view of Andrei et al. (U.S. pub 2003/0110177) (Eff. Filing date of provisional application 12/10/2001).

As to claim 28, Fisher et al. does not teach wherein the data structure is defined using XML (extended markup language) and includes a header tag indicative of a start position of a file and an end position of the file, and at least one data block tag indicative of one or more data blocks located between the header tag and the end tag comprising the file.

Andrei et al. teaches a data mapping engine (see abstract), in which he teaches wherein the data structure is defined using XML (extended markup language) and includes a header tag indicative of a start position of a file and an end position of the file, and at least one data block tag indicative of one or more data blocks located between the header tag and the end tag comprising the file (see paragraph 30).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Fisher et al.</u> by the teaching of <u>Andrei et al.</u>, because wherein the data structure is defined using XML (extended markup language) and includes a header tag indicative of a start position of a file and an end position of the

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file, and at least one data block tag indicative of one or more data blocks located between the header tag and the end tag comprising the file, would enable the storage system because, "each item name is then bound to the first item in the corresponding collection and the literal start tag associated with the XMMultiple object is output, blocks l66 and 168. At block 170, the map engine iterates over the child nodes, recursively appending each one to the XML output using the value s of the collection items currently bound to the items names, before the literal end tag is output at block 172. At block 174, a determination is made as to whether there are any additional items remaining in the collections, block 174. If so, each item name is bound to the next set of collection items, block 176, and the process repeats, starting by outputting another instance of the literal start tag, block 1683", (see Andrei et al., paragraph 60).

As to claim 29, <u>Fisher et al.</u> as modifies teaches wherein each data block tag is associated with a storage device, wherein the controller is operative to store data blocks indicated by a first data block tag onto a storage device associated with the first data block tag, wherein the controller is operative to store data blocks indicated by a second data block tag onto a storage device associated with the second data block tag (see <u>Andrei et al</u>, claim 10).

As to claim 30, <u>Fisher et al.</u> as modifies teaches wherein the controller is operative to select a predetermined data block based on the data block tag (see <u>Andrei et al.</u>, figures 7c-7d and paragraph 53-54).

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As to claim 31, Fisher et al. as modifies teaches wherein each data block tag is associated with a storage device, wherein the controller is operative to store data blocks indicated by a first data block tag onto a storage device associated with the first data block tag, wherein the controller is operative to store data blocks indicated by a second data block tag onto a storage device associated with the second data block tag (see Andrei et al, figures 7c-7d and paragraph 53-54).

## Response to Arguments

7. Applicant's arguments filed 24- March- 2006 with respect to the rejected claims in view of the cited references have been fully considered but they are not found persuasive:

In response to applicants' arguments that <u>Fisher et al.</u> "fail to teach or suggest a destination storage device is selected based at least on content of the data comprising the data block", the arguments have been fully considered but are not deemed persuasive, because <u>Leung et al.</u> teaches "the storage locations are determined based upon characteristics associated with the data to be stored, based upon characteristics of the storage devices, and based upon storage policies configured for the storage environment" (see <u>Leung et al.</u>, paragraph 12); and

Schilit et al., teaches a document storage management system and method that manages the storage of documents based upon the similarity of the content of the documents (see Schilit et al., abstract).

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until

after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to

37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Belix M. Ortiz whose telephone number is 571-272-4081.

The examiner can normally be reached on moday-friday 9am-5pm.

The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

CHARLES RONES

SUPERVISORY PATENT EXAMINER

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bmo

June 5, 2006